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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,565

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Alain Mugnier

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EXAMINER

WONG, TINA MEI SENG

ART UNIT

PAPER NUMBER

2874

MAIL DATE

DELIVERY MODE

12/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/511,565

Applicant(s)

MUGNIER ET AL.

Examiner

Tina M. Wong

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27, 29-33 and 35-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-17, 19-27, 29-33, 35-45 and 47-59 is/are rejected.
- 7) ☒ Claim(s) 14, 18 and 46 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 09/23/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted by the International Bureau under 35

U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13, 15-17, 19-27, 29-33, 35-45 and 47-59 are rejected under 35 U.S.C.

103(a) as being unpatentable over U.S. Patent 5,848,207 to Uetsuka et al in view of E.P.

0714861 to France Telecom.

In regards to claims 1, 16, 19-26, 33, 36, 41-45, 47 and 51, Uetsuka et al teaches forming a Bragg grating in an interior profile of an optical waveguide by allowing independent control of a longitudinal variation of the Bragg wavelength and a longitudinal variation of an exterior profile of the optical waveguide. But Uetsuka et al fails to specifically teach controlling varying interior profile of the optical waveguide. Uetsuka et al simply suggests there is a varying interior profile. However, Applicant discloses as prior art that the France Telecom reference teaches the melt drawing process as a method of forming a varying interior profile which would therefore produce a the required variations in an optical element. Since Uetsuka et al does not clearly state the method in which the varying profile is produce, only that one exists and France Telecom teaches clear advantages (Applicant Specification Page 13) for producing a varying profile, it

would have been obvious at the time the invention was made to a person having ordinary skill in the art for the varying profile to have been formed in the optical waveguide by the methods suggested by France Telecom.

In regards to claims 2-5, 35, 49 and 50, France Telecom teaches forming the varying interior profile to be formed from melt-drawing, which would meet the claim limitations of different forces and torsion.

In regards to claims 6, 7 and 13, France Telecom teaches controlling the varying interior profile by controlling the longitudinal variation of the effective optical index and locally correcting the exterior profile of the waveguide.

In regards to claims 8, 15, 39 and 40, Uetsuka et al teaches producing a constant period or linear grating or variable period.

In regards to claims 9-12, 17, 37 and 38, although locally correcting the exterior profile of the waveguide is taught, it is not explicitly stated if the correction is effected before or after the forming of the Bragg grating or the correcting is done by adding or subtracting material from the waveguide. However, since Applicant claims both before and after/adding and removing, it appears that the order of when this step is performed is not a critical aspect of the invention and either order would provide the same results. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have performed the function before or after/adding or removing.

In regards to claims 27 and 48, Uetsuka et al in view of France Telecom teaches a doped core, a doped inner cladding and silica outer cladding.

In regards to claims 29-32, although it is not explicitly stated for the grating to control the modulation, it would be implied for a grating to be able to perform modulation functions since the previously claimed formation of the gratings is disclosed by Uetsuka et al in view of France Telecom.

In regards to claims 52-59, Uetsuka et al in view of France Telecom teaches the filter claimed to be enabled to use in a system of filters in series and circulators in order to filter the incoming signal in order to obtain the desired output.

Allowable Subject Matter

Claims 14, 18 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. None of the documents cited by the Examiner discloses or reasonably suggests the allowable subject matter discussed above.

The documents submitted by applicant in the Information Disclosure Statement have been considered and made of record. Note attached copy of form PTO-1449. None of the references submitted by Applicant discloses or reasonably suggest the allowable subject matter discussed above.

Inventorship

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

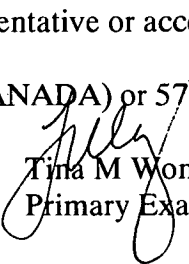
claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M. Wong whose telephone number is (571) 272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Tina M Wong
Primary Examiner